IN THE CLAIMS

Claims 1-17 (Canceled)

18. (Currently Amended) A signal coding method comprising the steps of:

determining a coding difficulty for each unit time of an input signal;

obtaining a reference value of allocation data amount interrelated with said coding difficulty of said input signal for said each unit time based on a standardized relationship between coding difficulty and allocation data amount, wherein said standardized relationship is based on a reference motion picture image sequence previously coded by way of variable bit rate coding with a predetermined average bit rate;

modifying said reference value of said allocation data amount into an actual allocation data amount; and

generating coded data by coding said input signal for said each unit time according to said actual allocation data amount,

wherein said step of modifying said reference value of said allocation data amount into an actual allocation data amount is characterized in that a total B av of allocation bit amount up to a current time is compared to a total B gen of actually generated coding bit amount up to the current time while coding the input signal for each unit time with a constant allocation bit amount b av, and if a value (B av - B gen) is positive, it is allowed to assign an allocation bit amount equal to or above b av which is defined as follows:

b av = T GOP x BV/T SEQ

wherein

BV is a bit amount available in a signal recording medium for a moving picture recording;

T SEQ is a time length of a moving picture sequence which can be recorded on a

signal recording medium; and

T GOP is a unit time length.--

--19. (Previously Presented) A signal coding method as claimed in Claim 18,

wherein said step of modifying said reference value of said allocation data amount into an actual

allocation data amount is carried out by controlling an actual allocation bit amount, so that a total

of a bit amount generated when a signal of a time length which can be recorded on a recording

medium is equal to or below a bit amount available in the recording medium for signal

recording.--

--20. (Previously Presented) A signal coding method as claimed in Claim 18,

wherein said input signal is subjected to a pre-filter processing according to an information used

when modifying said reference value of the allocation data amount into an actual allocation data

amount, and said signal processed is coded.--

--21. (Previously Presented) A signal coding method as claimed in Claim 20,

wherein said pre-filter processing carries out a low-pass filter processing to an input image when

suppressing said actual allocation data amount below said reference value of the allocation data

amount.--

--22. (Previously Presented) A signal coding method as claimed in Claim 18,

wherein when said input signal is a moving picture image signal, said coding difficulty is

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determined according to an image characteristic information of said input image for each

predetermined period of time and coding is carried out with an allocation data amount reflecting

human visual characteristic based on said image characteristic information.--

--23. (Currently Amended) A signal coding apparatus comprising:

coding difficulty calculating means for determining a coding difficulty for each

unit time of an input signal;

means for obtaining a reference value of allocation data amount interrelated with

said coding difficulty of said input signal for said each unit time based on a standardized

relationship between coding difficulty and allocation data amount, wherein said standardized

relationship is based on a reference motion picture image sequence previously coded by way of

variable bit rate coding with a predetermined average bit rate;

means for modifying said reference value of said allocation data amount into an

actual allocation data amount; and

coding means for generating coded data by coding said input signal for said each

unit time according to said actual allocation data amount,

wherein said means for modifying said reference value of said allocation data

amount into an actual allocation data amount is characterized in that a total B av of allocation bit

amount up to a current time is compared to a total B gen of actually generated coding bit amount

up to the current time while coding the input signal for each unit time with a constant allocation

bit amount b av, and if a value (B av - B gen) is positive, it is allowed to assign an allocation bit

amount equal to or above b av which is defined as follows:

b av = T GOP x BV/T SEQ

wherein

BV is a bit amount available in a signal recording medium for a moving picture

recording;

T SEQ is a time length of a moving picture sequence which can be recorded on a

signal recording medium; and

T GOP is a unit time length.--

--24. (Previously Presented) A signal coding apparatus as claimed in Claim 23,

wherein said means for modifying said reference value of said allocation data amount into an

actual allocation data amount controls an actual allocation bit amount, so that a total of a bit

amount generated when a signal of a time length which can be recorded on a recording medium

is equal to or below a bit amount available in the recording medium for signal recording.--

--25. (Previously Presented) A signal coding apparatus as claimed in Claim 24,

said apparatus further comprising pre-filter means for a pre-filter processing to said input signal,

which filter means carries out a low-pass filter processing to an input image when suppressing

said actual allocation data amount below the reference value of the allocation data amount.--

--26. (Currently Amended) A signal recording medium on which a coded signal

is to be recorded, wherein said coded signal is obtained by:

determining a coding difficulty for each unit time of an input signal;

obtaining a reference value of allocation data amount interrelated with said coding

difficulty of said input signal for said each unit time based on a standardized relationship

between coding difficulty and allocation data amount, wherein said standardized relationship is based on a reference motion picture image sequence previously coded by way of variable bit rate coding with a predetermined average bit rate;

modifying said reference value of said allocation data amount into an actual allocation data amount; and

generating coded data by coding said input signal for said each unit time according to said actual allocation data amount,

wherein said step of modifying said reference value of said allocation data amount into an actual allocation data amount is characterized in that a total B av of allocation bit amount up to a current time is compared to a total B gen of actually generated coding bit amount up to the current time while coding the input signal for each unit time with a constant allocation bit amount b av, and if a value (B av - B gen) is positive, it is allowed to assign an allocation bit amount equal to or above b av which is defined as follows:

b av = T GOP x BV/T SEQ

wherein

BV is a bit amount available in a signal recording medium for a moving picture recording;

T SEQ is a time length of a moving picture sequence which can be recorded on a signal recording medium; and

T GOP is a unit time length.--

--27. (Currently Amended) A signal transmission method comprising:

determining a coding difficulty for each unit time of an input signal;

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obtaining a reference value of allocation data amount interrelated with said coding

difficulty of said input signal for said each unit time based on a standardized relationship

between coding difficulty and allocation data amount, wherein said standardized relationship is

based on a reference motion picture image sequence previously coded by way of variable bit rate

coding with a predetermined average bit rate;

modifying said reference value of said allocation data amount into an actual

allocation data amount;

generating coded data by coding said input signal for said each unit time

according to said actual allocation data amount; and

transmitting said generated coded data,

wherein said step of modifying said reference value of said allocation data amount

into an actual allocation data amount is characterized in that a total B av of allocation bit amount

up to a current time is compared to a total B gen of actually generated coding bit amount up to

the current time while coding the input signal for each unit time with a constant allocation bit

amount b av, and if a value (B av - B gen) is positive, it is allowed to assign an allocation bit

amount equal to or above b av which is defined as follows:

b av = T GOP x BV/T SEQ

wherein

BV is a bit amount available in a signal recording medium for a moving picture

recording;

T SEQ is a time length of a moving picture sequence which can be recorded on a

signal recording medium; and

T GOP is a unit time length.--

--28. (Previously Presented) A signal transmission method as claimed in Claim 27, wherein said input signal is subjected to a pre-filter processing according to an information used when modifying said reference value of the allocation data amount into an actual allocation data amount, and said signal processed is coded.--

--29. (Previously Presented) A signal transmission method as claimed in Claim 28, wherein said pre-filter processing carries out a low-pass filter processing to an input image when suppressing said actual allocation data amount below said reference value of the allocation data amount.--

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